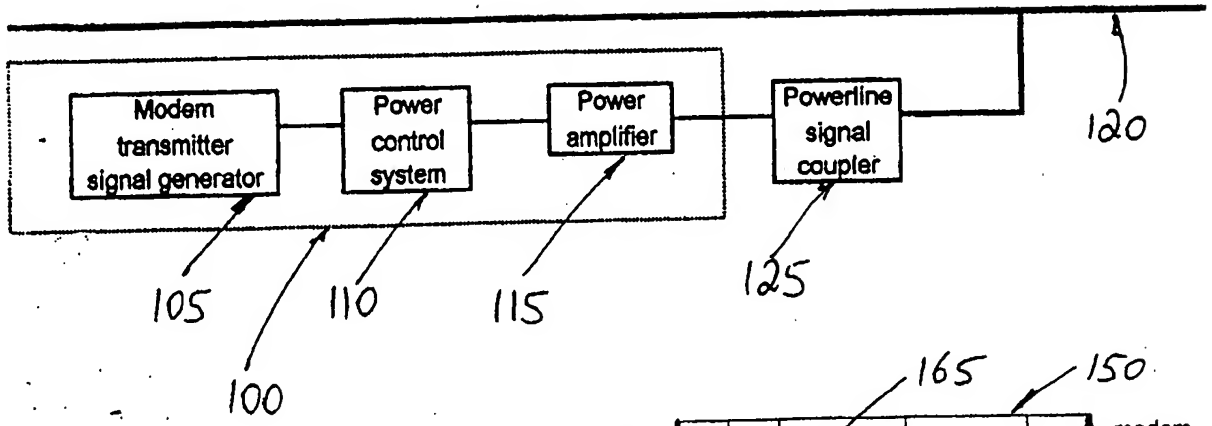

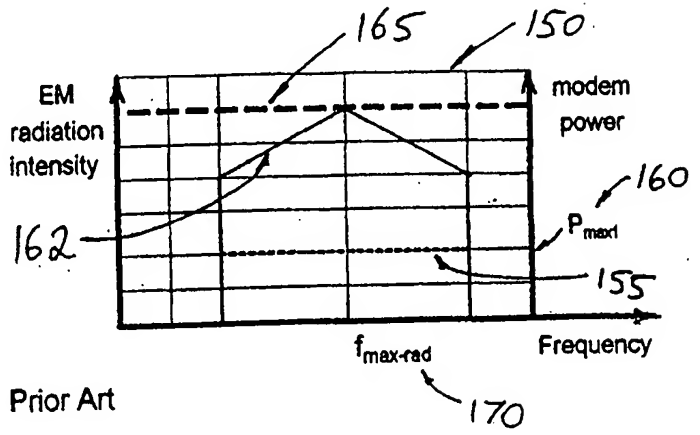

Figure 1 Prior Art

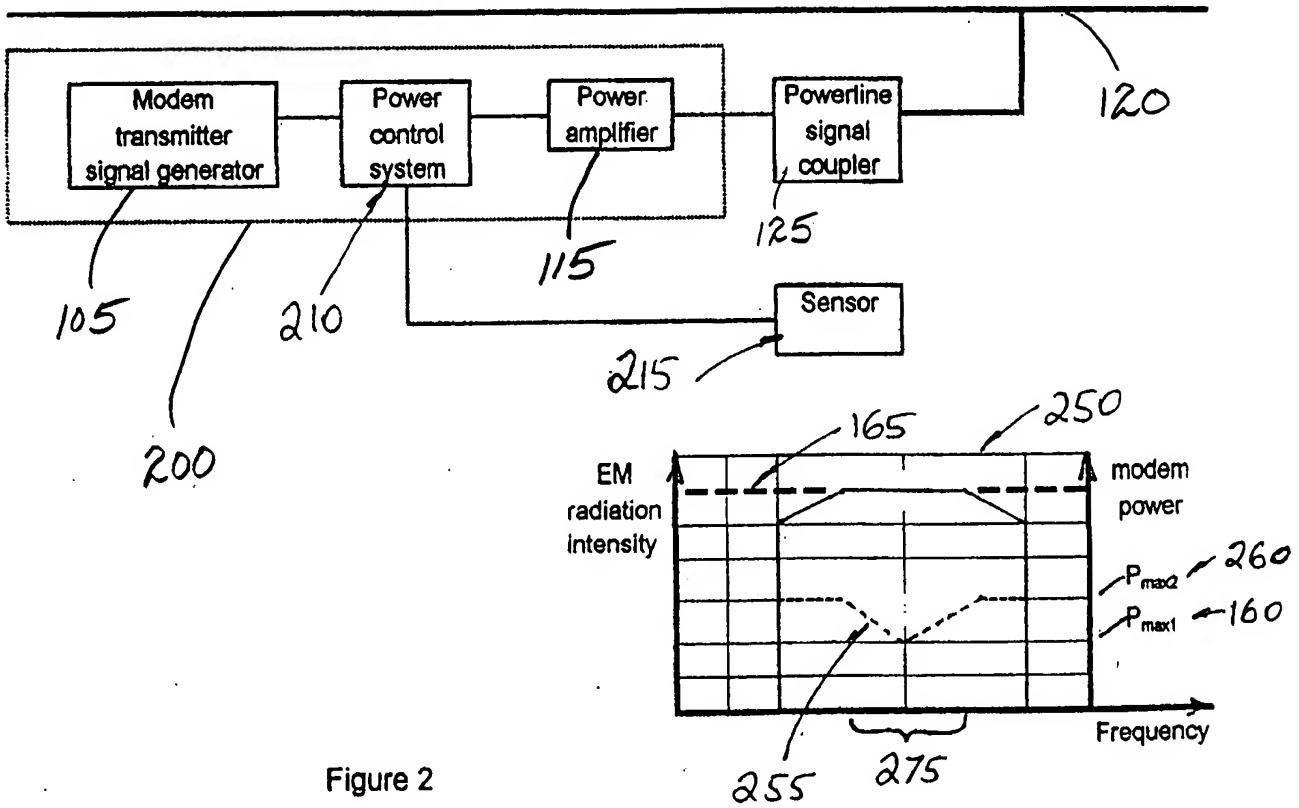
Modem transmitter signal generator
Power control system
Power amplifier
Powerline signal coupler
120
125
115
105
210
Sensor
215
200
165
250
EM radiation intensity
modem power
P_{max2}
260
P_{max1}
160
Frequency
255
275

Figure 2

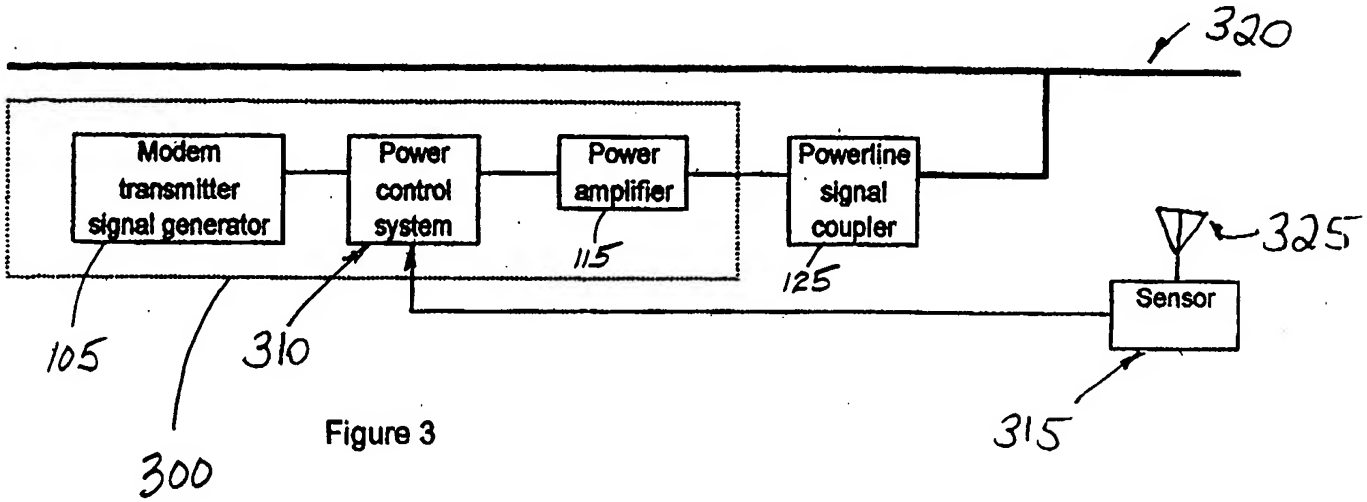
320
Modem transmitter signal generator
Power control system
Power amplifier
Powerline signal coupler
325
Sensor
105
310
115
125
300
315

Figure 3

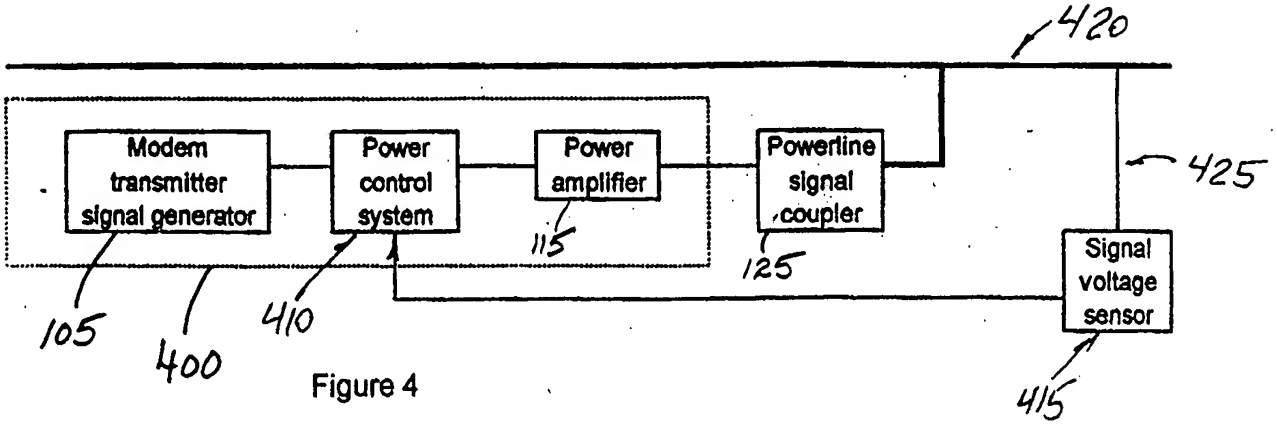
420
Modem transmitter signal generator
Power control system
Power amplifier
Powerline signal coupler
425
Signal voltage sensor
105
400
410
115
125
415

Figure 4

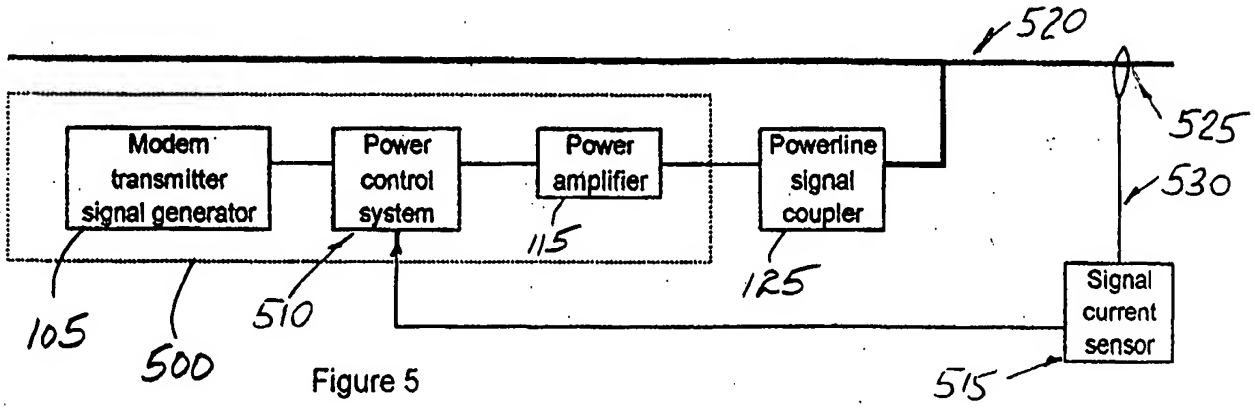
520
525
530
Modem transmitter signal generator
Power control system
Power amplifier
Powerline signal coupler
Signal current sensor
105
500
510
115
125
515

Figure 5

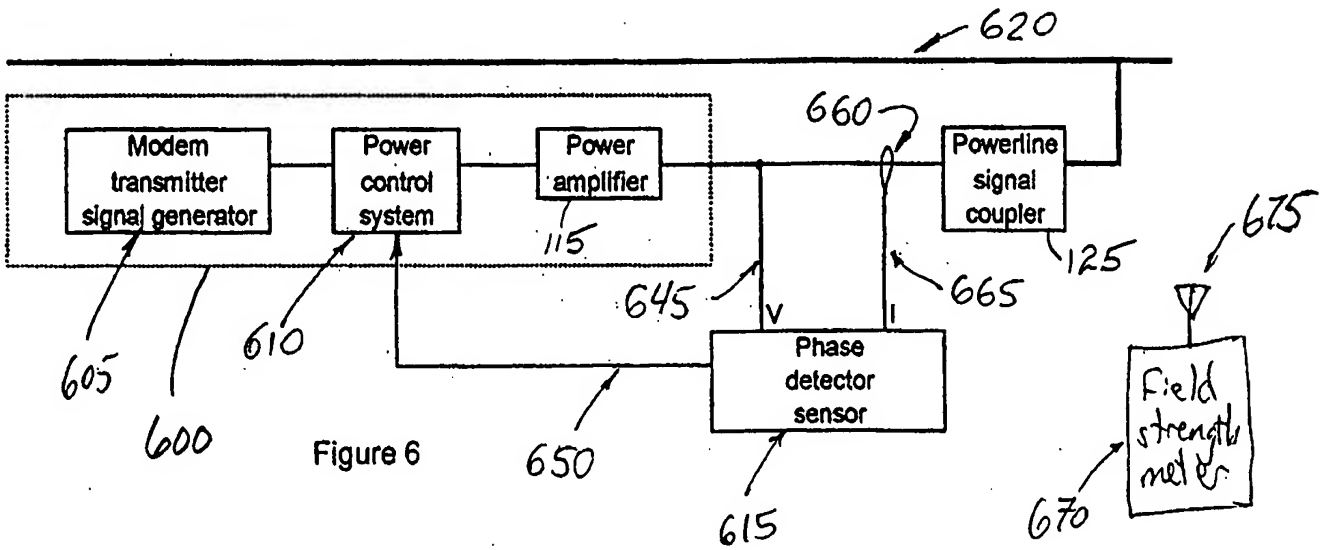
620
Modem transmitter signal generator
Power control system
Power amplifier
115
660
Powerline signal coupler
125
675
645
V
I
665
605
610
600
650
Phase detector sensor
615
Field strength meter
670

Figure 6